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Haynes and Boone, LLP			EXAMINER	
IP Section			KIM, HEE-YONG	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,500	Applicant(s) HONG ET AL.
	Examiner HEE-YONG KIM	Art Unit 2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 June 2010.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4, and 18-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement (PTO/GP-06)
 Paper No(s)/Mail Date 6/16/2010 and 6/21/2010
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date: _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Response to Amendment

1. This office action is in reply to Applicant's Response dated June 17, 2010.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
3. **Claims 1-4** has been amended.
4. **Claims 5-17** have been cancelled.
5. **Claims 18-22** are newly added.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4, 18-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
8. **Claims 1-4, and 18-22** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding independent **claims 18 and 21**, they recite "information specifying a presentation priority for each modality of a plurality of first modalities, at least one of the first modalities being a visual modality; obtaining, by the system, contents to be presented to the user". However, "the first modalities" are not disclosed in the specification and therefore it is a new matter. For the prosecution of the application, the first modalities are modalities with the higher priorities.

Regarding remaining claims, they are dependent on the above independent claims. Therefore, they are rejected too.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-4, and 18-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Surve (US patent 6,591,008) in view of Fink (New Review of Hypermedia and Multimedia, vol.4, issue 1, 1998) and further in view of Carro (US 7,316,566), hereafter referenced as Surve and Fink and Carro respectively.

Regarding **claim 18**, Surve discloses Methods and Apparatus for Displaying Pictorial Images to Individuals Who have Impaired Color and/or Spatial Vision. Specifically Surve discloses A method for adapting presentation contents to a user's

perceptibility impairment *contents* (Fig.1 Method for Displaying a Digital Color to a Visually Impaired Person) comprising a low-vision impairment symptom (vision impairment, col.1, line 9-12), the method comprising:

obtaining, by a system, information on the user's perceptibility impairment (vision impairment, col.1, line 9-12). However, Surve fails to disclose the information specifying a presentation priority for each modality of a plurality of first modalities, at least one of the first modalities being a visual modality;

obtaining, by the system, contents to be presented to the user, wherein the contents comprise objects of different modalities which comprise the visual modality;

adapting, by the system, the contents according to the information and thus obtaining adapted contents, wherein the contents comprise objects of first modalities one of which is said visual modality, and adapting the contents comprises, for each object of any first modality, adapting the object in accordance with the first modality's presentation priority to obtain an adapted object whose modality is unchanged but whose presentation quality is enhanced or not in accordance with the first modality's presentation priority; and providing the adapted contents to a presentation device for presenting the adapted contents to the user.

In the analogous field of endeavor, Fink discloses Adaptable and Adaptive Information Provision for All Users, Including Disabled and Elderly People. Specifically Fink discloses the information specifying a presentation priority for each modality of a plurality of first modalities (preference for certain information modalities, pp.6, line 1-3), at least one of the first modalities being a visual modality (e.g. graphics, video, pp.6,

line 3) ;

obtaining, by the system, contents to be presented to the user, wherein the contents comprise objects of different modalities (text, images, videos, pp.4, line 8-9) which comprise the visual modality, in order to provide user-oriented adaptivity (pp.5, last 3 lines).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Surve by specially providing information specifying a presentation priority for each modality of a plurality of first modalities, at least one of the first modalities being a visual modality; obtaining, by the system, contents to be presented to the user, wherein the contents comprise objects of different modalities, in order to accommodate adaptation at the client. However, Surve and Fink still fail to disclose adapting, by the system, the contents according to the information and thus obtaining adapted contents, wherein the contents comprise objects of first modalities one of which is said visual modality, and adapting the contents comprises, for each object of any first modality, adapting the object in accordance with the first modality's presentation priority to obtain an adapted object whose modality is unchanged but whose presentation quality is enhanced or not in accordance with the first modality's presentation priority; and providing the adapted contents to a presentation device for presenting the adapted contents to the user.

In the analogous field of endeavor, Carro discloses Method for Accessing Interactive Multimedia Information or Services from Braille Documents. Carro specifically discloses adapting the visual contents by enhancing (magnifying) text and

images (col.2, line 13-16), in order to improve the vision of the visually impaired (col.2, line 13-16).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Surve and Fink by specially providing adapting the visual content for the low-vision user according to the presentation priority (first modalities are visual) and providing adaptive contents by magnifying text and images without change of modality, in order to improve the vision of the visually impaired. The Surve method, incorporating the Fink specifying and obtaining a presentation priority for each modality, further incorporating the Carro adapting the visual content for the low-vision user to enhance the visual content according to the presentation priority and providing adaptive contents by magnifying the text and images, has all the features of claim 18.

Regarding **claim 1**, Surve and Fink and Carro disclose everything claimed as applied above (see claim 18). In addition, Surve discloses *further comprising displaying the adapted visual contents* (Adaptation by Adjustment Section 50, 60, and 70, Fig.1) by *the presentation device* (Display Screen 90, Fig.1).

Regarding **claim 2**, Surve and Fink and Carro disclose everything claimed as applied above (see claim 18). Surve further discloses *wherein the information about the user's perceptibility impairment includes at least one of information indicating whether or not left or right eyes of the user are blind, left and right visions of the user, and the kind*

of the low-vision impairment symptom (impaired color, spatial discrimination, Column 2, line 58).

Regarding **claim 3**, Surve and Fink and Carro disclose everything claimed as applied above (see claim 18). Surve further discloses *wherein the information about the user's perceptibility impairment includes a numerical descriptor (numerical value) that describes a degree of the user's low-vision impairment symptom* (gain factor for color content adjustment, contrast adjustment and spatial adjustment, Column 3, line 1- 8).

Regarding **claim 4**, Surve and Fink and Carro discloses everything claimed as applied above (see claim 18). Surve further discloses *wherein the information about the user's perceptibility impairment includes at least one selected from the group consisting of a degree of "loss of fine detail", a degree of "lack of contrast" (contrast parameter, Column 4, line 3-15, and figure 4), a degree of "light sensitivity", a degree of "need of light", a degree of "loss of peripheral vision field", a degree of "loss of central vision field" and a degree of "loss of half field of vision".*

Regarding **claim 19**, the Surve method, incorporating the Fink specifying and obtaining a presentation priority for each modality, further incorporating the Carro adapting the visual content for the low-vision user to enhance the visual content according to the presentation priority and providing adaptive contents by magnifying the text and images, as applied to claim 18, discloses wherein for at least one first modality the adapted object's presentation quality is enhanced (Carro: magnify text and images for low-vision user, col.2, line 13-16).

Regarding **claim 20**, the claimed invention is a system claim corresponding to the method claim 18. Therefore, it is rejected for the same reason as claim 18.

Regarding **claim 21**, the Surve method, incorporating the Fink specifying and obtaining a presentation priority for each modality, further incorporating the Carro adapting the visual content for the low-vision user to enhance the visual content according to the presentation priority and providing adaptive contents by magnifying the text and images, teaches wherein the unit for receiving the contents is for receiving the contents over a wired or wireless network (Fink: network-wide user modeling service, pp.8, line 6 from bottom).

Regarding **claim 22**, the claimed invention is a system claim corresponding to the method claim 1. Therefore, it is rejected for the same reason as claim 1.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEE-YONG KIM whose telephone number is (571)270-3669. The examiner can normally be reached on Monday-Thursday, 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/HEE-YONG KIM/
Examiner, Art Unit 4192

/Andy S. Rao/
Primary Examiner, Art Unit 2621
June 25, 2010